



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,521	02/27/2004	Josef Chalupper	P04,0054	6889
26574	7590	12/23/2009	EXAMINER	
SCHIFF HARDIN, LLP			MONIKANG, GEORGE C	
PATENT DEPARTMENT				
233 S. Wacker Drive-Suite 6600			ART UNIT	PAPER NUMBER
CHICAGO, IL 60606-6473			2614	
			MAIL DATE	DELIVERY MODE
			12/23/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/788,521	CHALUPPER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	GEORGE C. MONIKANG	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 November 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 21-30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 21-30 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.  	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 21-22, 24-27 & 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinfurtner et al, US Patent 6035050, in view of Cheng, US Patent Pub. 20020078161 A1.

4. Re Claim 21, Weinfurtner et al discloses a method to automatically adjust a new hearing aid, comprising the steps of: temporarily bringing a first hearing aid, having an acoustic input and an acoustic output and that has been worn by a hearing-impaired person, into active communication with a measurement device that is a separate device from, and is external to, said first hearing aid (*fig. 1: 20 & 40; col. 2, lines 4-37*); from a processor, operating said measurement device to obtain, by said active communication with said first hearing aid, a detected operational characteristic of said first hearing aid that represents overall operation of said first hearing aid between said acoustic input and said acoustic output of said first hearing aid (*figs. 1 & 4; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*); supplying said operational characteristic of said first hearing aid from said measurement device to said processor and, in said processor, automatically analyzing said operational characteristic of said first hearing aid to obtain an analysis result (*figs. 1-2 & 4; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*); but fails to explicitly disclose automatically determining, from said analysis result, setting parameters for electronic circuitry in a second hearing aid that is to replace said first hearing aid as a new hearing aid to be worn by said hearing impaired person, temporarily placing said second hearing aid in active communication with a setting device that is connected to

said processor and that is a separate device from, and is external to, said second hearing aid; and from said processor, setting said electronic circuitry in said second hearing aid with said setting parameters via said active communication between said setting device and said second hearing aid. However, the Cheng reference disclose a UPnP enabling device (*Cheng, fig. 1: 200*) along with a UPnP controller (*Cheng, fig. 1: 120*) where the devices that are not UPnP compatible are made UPnP compatible, thus enabling a message to be sent by one device to another via the UPnP controller requesting a particular service being done by that device to be carried out after which the results are communicated back to the requesting device via the UPnP controller (*Cheng, para 0022*). Therefore, it would have been obvious to implement a UPnP enabler and controller such that when a user is using the secondary auxiliary hearing aid (*Weinfurtner et al, fig. 2*), he/she can still have access to the parameters that were set when the first auxiliary hearing aid (*Weinfurtner et al, fig. 1: 20*) was being used in contact with the controller 40 (*Weinfurtner et al, fig. 1: 40*) in such a manner that the controller 40 does not need to be in the immediate vicinity of the secondary auxiliary hearing aid (*Weinfurtner et al, fig. 2*) thus providing a more convenient hearing aid system.

Re Claim 22, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said first hearing aid has a memory in which setting parameters for electronic circuitry in said first hearing aid are stored, and wherein the step of obtaining said operational characteristic from said first hearing aid comprises reading out said setting parameters from said memory of said first hearing

aid and supplying said setting parameters read from the memory of the first hearing aid to said processor (*Weinfurtner et al, figs. 4: 32, 34; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*), and wherein said second hearing aid has a memory connected to said electronic circuitry of said second hearing aid, and wherein the step of setting said electronic circuitry in said second hearing aid with said setting parameters determined from said operational characteristic of said first hearing aid comprises entering the setting parameters read from said memory of said first hearing aid into said memory of said second hearing aid (*Weinfurtner et al, figs. 4: 32, 34; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*).

Re Claim 24, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said measurement device is a first measurement device, and comprising placing said second hearing aid in active communication with a second measurement device, and operating said second measurement device from said processor to obtain an operational characteristic representing overall operation of said second hearing aid between an acoustic input thereof and an acoustic output thereof (*Cheng, fig. 1: 120, 200 para 0022: the second auxiliary hearing aid of Weinfurtner et al is in communication with a plurality of devices that include an UPnP enabler and UPnP controller*).

Claims 25-26 & 30 have been analyzed and rejected according to claim 21.

Claim 27 has been analyzed and rejected according to claim 22.

Claim 29 has been analyzed and rejected according to claim 24.

1. Claims 23 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinfurtner et al, US Patent 6035050 and Cheng, US Patent Pub. 20020078161 A1 as applied to claim 21 above, and further in view of Shennib, US Patent 5825894. (The Shennib reference is cited in IDS filed 3/27/2006).

Re Claim 23, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said measurement device comprises a speaker and a microphone, and wherein the step of obtaining said operational characteristic of said first hearing aid comprises emitting an acoustic signal from said speaker into said acoustic input of said first hearing aid and detecting an acoustic signal with said microphone from said acoustic output of said first hearing aid (figs. 1 & 4; col. 5, lines 14-26); but fails to disclose wherein the step of automatically analyzing said operational characteristic of said first hearing aid comprises automatically identifying, as said analysis result, a transfer function of said first hearing aid, between said acoustic input and said acoustic output, as a ratio of said signal supplied to said acoustic input of said first hearing aid and said signal emitted from said acoustic output of said first hearing aid. However, Shennib discloses a hearing aid that is capable of analyzing input signals and generating an ear canal transfer function for the user (Shennib, abstract). Therefore it would have been obvious to modify the hearing aids of Weinfurtner et al with the ability to determine an ear canal transfer function as taught in Shennib (Shennib,

*abstract)* for the purpose of providing measurements that are directly correlated across all phases of hearing assessment.

Claim 28 has been analyzed and rejected according to claim 23.

### Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE C. MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/788,521  
Art Unit: 2614

Page 8

/George C Monikang/  
Examiner, Art Unit 2614

12/16/2009

/Vivian Chin/  
Supervisory Patent Examiner, Art Unit 2614